



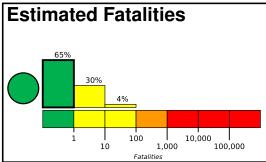


**PAGER** Version 3

Created: 1 day, 0 hours after earthquake

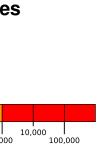
## M 5.4, 82 km S of San Juan, Peru

Origin Time: 2023-08-18 10:27:55 UTC (Fri 05:27:55 local) Location: 16.1071° S 75.0833° W Depth: 18.1 km

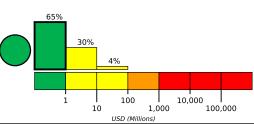


and economic losses. There is a low likelihood of casualties and damage.





Green alert for shaking-related fatalities Estimated Economic Losses



**Estimated Population Exposed to Earthquake Shaking** 

| ESTIMATED POPULATION<br>EXPOSURE (k=x1000) |                          | _*       | 233k   | 11k   | 0        | 0        | 0           | 0          | 0        | 0        |
|--|--------------------------|----------|--------|-------|----------|----------|-------------|------------|----------|----------|
| ESTIMATED MODIFIED MERCALLI INTENSITY      |                          | I        | 11-111 | IV    | V        | VI       | VII         | VIII       | IX       | X+       |
| PERCEIVED SHAKING                          |                          | Not felt | Weak   | Light | Moderate | Strong   | Very Strong | Severe     | Violent  | Extreme  |
| POTENTIAL<br>DAMAGE                        | Resistant<br>Structures  | None     | None   | None  | V. Light | Light    | Moderate    | Mod./Heavy | Heavy    | V. Heavy |
|  | Vulnerable<br>Structures | None     | None   | None  | Light    | Moderate | Mod./Heavy  | Heavy      | V. Heavy | V. Heavy |

<sup>\*</sup>Estimated exposure only includes population within the map area.

### Population Exposure

#### population per 1 sq. km from Landscan Structures

Overall, the population in this region resides in structures that are highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are mud wall and

reinforced/confined masonry construction.

### **Historical Earthquakes**

| Date       | Dist. | Mag. | Max        | Shaking |
|------------|-------|------|------------|---------|
| (UTC)      | (km)  |      | MMI(#)     | Deaths  |
| 2001-12-04 | 296   | 5.8  | VI(32k)    | 2       |
| 1981-04-18 | 341   | 5.5  | VI(193k)   | 8       |
| 2007-08-15 | 344   | 8.0  | VIII(493k) | 514     |

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

# Selected City Exposure

from GeoNames.org MMI City IV Lomas IV Yauca IV San Juan de Marcona Ш Acari Ш Atiquipa Ш Chala Ш Minas de Marcona Ш Nazca

Coracora bold cities appear on map.

**Palpa** 

**Puguio** 

Ш

Ш

Ш

(k = x1000)

Population

<1k

<1k

<1k

<1k

<1k

15k

24k

6k

10k

7k

4k

| <u>. opan</u>          |     | -10 - 0 - 0 - 0 |                     |                     | lilon per i sq. km |          |
|------------------------|-----|-----------------|---------------------|---------------------|--------------------|----------|
| 0                      | 5   | 50              | 100 50              | 0 1000              | 5000               | 10000    |
| 1                      | 7// | 7.5.9°W         | 7 <i>/</i><br>Palpa | .a°V                | 73<br>Puquio       | 8.6°W // |
|                        |     |                 |                     | zca                 |                    | oracoro  |
|                        |     |                 | Minas c             | de Marcona<br>Acari |                    |          |
| 15.8°S                 |     | //              |                     |                     | -Tocota            |          |
| -16.9°S                |     |                 |                     |                     | Chala              | Atico    |
| Contract of the second |     | 111             |                     |                     | km                 |          |
|                        |     |                 | and only consid     | 0                   | 50                 | 100      |

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.